(FILE 'HOME' ENTERED AT 13:25:39 ON 20 OCT 2000)

FILE 'REGISTRY' ENTERED AT 13:25:59 ON 20 OCT 2000
L1 STRUCTURE UPLOADED
L2 STRUCTURE UPLOADED
L3 4 S L2
L4 573 S L2 SSS FULL

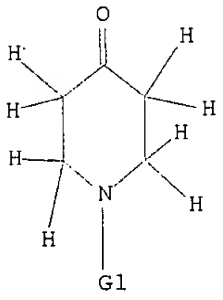
FILE 'CAPLUS' ENTERED AT 13:37:19 ON 20 OCT 2000
L5 1638 S L4
L6 6 S L5 AND DIMERIZATION
L7 86 S L5 AND REDUCTIVE
L8 0 S L7 AND METAL
L9 14 S L5 AND METAL
L10 0 S L9 AND REDUCING
L11 1 S L6 AND L7
L12 35 S L7 AND PIPERIDINE
L13 35 S L12 NOT L9
L14 35 S L13 NOT L6
L15 5 S L5 AND ANTIHISTAMINE

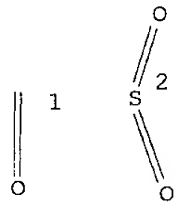
FILE 'REGISTRY' ENTERED AT 13:55:42 ON 20 OCT 2000
E LORATIDINE/CN
L16 1 S E3

FILE 'CAPLUS' ENTERED AT 13:56:21 ON 20 OCT 2000
L17 311 S L16
L18 7 S L5 AND L17
L19 6 S L18 NOT L15

=> d l2

L2 HAS NO ANSWERS
L2 STR



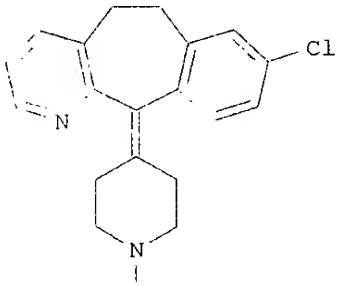


G1 Me,Et,n-Pr,i-Pr,n-Bu,i-Bu,s-Bu,t-Bu,Ph,Hy,[@1],[@2]

L19 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2000 ACS
AN 2000:454330 CAPLUS
DN 133:73940
TI Process for the preparation of loratadine
IN Stampa, Alberto; Camps, Pelayo; Rodriguez, Gloria; Bosch, Jordi; Onrubia, Mariadel Carmen
PA Medichem, S.A., Spain
SO U.S., 4 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6084100	A	20000704	US 1998-58837	19980413
			US 1997-48083	19970530

OS CASREACT 133:73940
GI

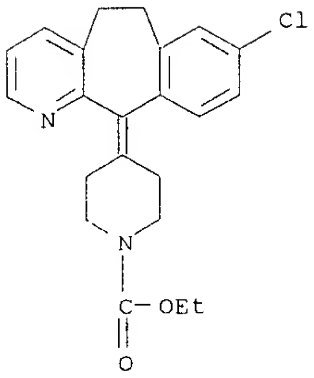


I

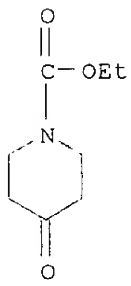
AB The title compd. I was prepd. by the reductive coupling between 8-chloro-5,6-dihydrobenzo[5,6]cyclohepta[1,2-b]pyridin-11-one and Et 4-oxopiperidine-1-carboxylate through the action of low-valent titanium species.

IT **79794-75-5P**, Loratadine
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)
(process for the prepn. of loratadine)

RN 79794-75-5 CAPLUS
CN 1-Piperidinecarboxylic acid, 4-(8-chloro-5,6-dihydro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-ylidene)-, ethyl ester (9CI) (CA INDEX NAME)



IT **29976-53-2**
RL: RCT (Reactant)
(process for the prepn. of loratadine)
RN 29976-53-2 CAPLUS
CN 1-Piperidinecarboxylic acid, 4-oxo-, ethyl ester (6CI, 8CI, 9CI) (CA INDEX NAME)



L19 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2000 ACS
AN 1998:608599 CAPLUS
DN 129:230642
TI Process for the preparation of 10,11-dihydro-5H-dibenzo[a,d]cycloheptenes.
IN Jackson, William Paul
PA Rolabo S.L., Spain.
SO PCT Int. Appl., 19 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9838166	A1	19980903	WO 1998-GB605	19980226
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
				GB 1997-3992	19970226
	AU 9863047	A1	19980918	AU 1998-63047	19980226
				GB 1997-3992	19970226
				WO 1998-GB605	19980226
	EP 970050	A1	20000112	EP 1998-907067	19980226
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				

IE, SI, LT, LV, FI, RO

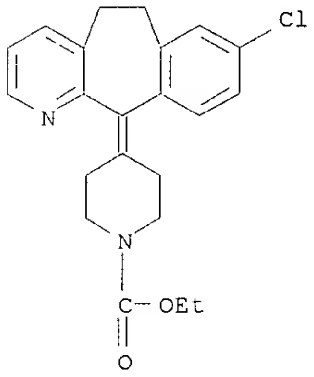
				GB 1997-3992	19970226
				WO 1998-GB605	19980226
US 6093827	A	20000725		US 1999-383078	19990826
				GB 1997-3992	19970226
				WO 1998-GB605	19980226

OS CASREACT 129:230642; MARPAT 129:230642
GI

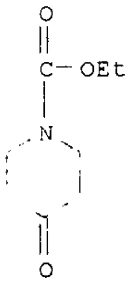
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The title 10,11-dihydro-5H-dibenzo[a,d]cyclohept-5-enes (e.g. loratadine) [I;] were prepd. by reacting a dibenzozuberone II with an aliph. ketone III in the presence of low valent titanium. The reaction proceeds via an intermediate diol IV which maybe isolated by conducting the reaction at a lower temp.

IT **79794-75-5P**
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)
(process for the prepn. of 10,11-dihydro-5H-dibenzo[a,d]cyclohept-5-enes)
RN 79794-75-5 CAPLUS
CN 1-Piperidinecarboxylic acid, 4-(8-chloro-5,6-dihydro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-ylidene)-, ethyl ester (9CI) (CA INDEX NAME)



IT **29976-53-2**
RL: RCT (Reactant)
(process for the prepn. of 10,11-dihydro-5H-dibenzo[a,d]cyclohept-5-enes)
RN 29976-53-2 CAPLUS
CN 1-Piperidinecarboxylic acid, 4-oxo-, ethyl ester (6CI, 8CI, 9CI) (CA INDEX NAME)



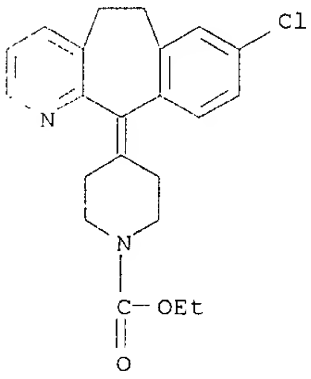
L19 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2000 ACS
AN 1997:796577 CAPLUS
DN 128:22821
TI Preparation of ethyl 4-(5,6-dihydro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-ylidene)piperidine-1-carboxylate
IN Rey, Max; Gladow, Stefan
PA Cilag Ag, Switz.
SO Patentschrift (Switz.), 8 pp.
CODEN: SWXXAS
DT Patent
LA German

this appl ".

FAN.CNT 1

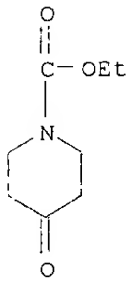
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI CH 688412	A	19970915	CH 1997-571	19970311
WO 9840376	A1	19980917	WO 1998-CH91	19980306
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
			CH 1997-571	19970311
AU 9860869	A1	19980929	AU 1998-60869	19980306
			CH 1997-571	19970311
			WO 1998-CH91	19980306

OS MARPAT 128:22821
AB The title compd. was prepd. in 94% yield by condensation of 5,6-dihydro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-one with 1-(ethoxycarbonyl)-4-piperidone. The 8-chloro- and 8-fluoro- derivs. of the title compd. were similarly prepd.
IT **79794-75-5P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)
RN 79794-75-5 CAPLUS
CN 1-Piperidinecarboxylic acid, 4-(8-chloro-5,6-dihydro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-ylidene)-, ethyl ester (9CI) (CA INDEX NAME)

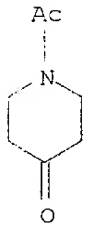


IT **29976-53-2 32161-06-1**
RL: RCT (Reactant)
(prepn. of Et 4-(5,6-dihydro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-ylidene)piperidine-1-carboxylate)
RN 29976-53-2 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-oxo-, ethyl ester (6CI, 8CI, 9CI) (CA INDEX NAME)



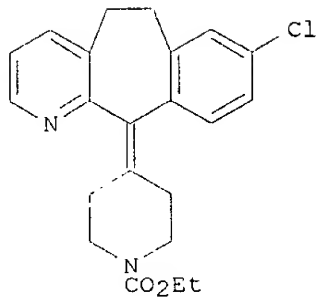
RN 32161-06-1 CAPLUS
CN 4-Piperidinone, 1-acetyl- (9CI) (CA INDEX NAME)



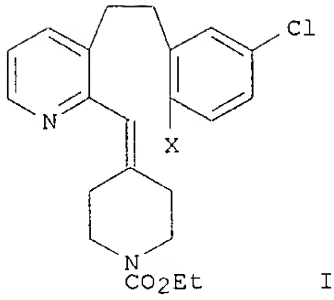
L19 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2000 ACS
AN 1996:623082 CAPLUS
DN 125:275661
TI New process for the preparation of loratadine.
IN Jackson, William Paul; Gracia Egea, Antonio
PA Farmihispania, S.A., Spain
SO Span., 11 pp.
CODEN: SPXXAD
DT Patent
LA Spanish
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	ES 2080700	A1	19960201	ES 1994-1648	19940727
	ES 2080700	B1	19961016		

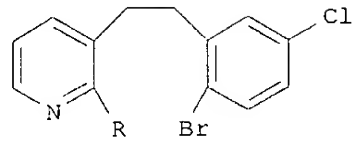
OS CASREACT 125:275661; MARPAT 125:275661
GI



I



II



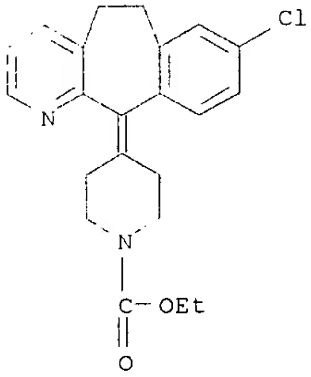
III

AB A process for prepn. of the antihistaminic loratadine (I), involving Pd-catalyzed cyclization of compds. II [X = halo], is disclosed. Thus, 3-methyl-N-tert-butylpicolinamide was lithiated with BuLi in THF, then treated with 2-bromo-5-chlorobenzyl bromide to give 100% intermediate III [R = CONHBu-tert]. This was hydrolyzed, first in refluxing 40% H2SO4, and then in aq. NaOH at .ltoreq. 50.degree., to give 37% III [R = CO2H], which was treated with ClCO2Et and Et3N, and then with aq. NaBH4, to give after acidification 80% III.HCl [R = CH2OH]. The latter was treated with SOCl2 to give 70% III [R = CH2Cl]. This was treated with P(OMe)3 at reflux to give III [R = CH2P(O)(OMe)2], which reacted with NaH and N-ethoxycarbonyl-4-piperidone in THF to give 40% II [X = Br]. Cyclization of this in DMF in the presence of Pd(OAc)2, PPh3, and Et3N at 100.degree., gave I. The analyzed conversion and yield were 98% and 90%. After purifn. by active C and crystn., the isolated yield was 60%, with the product identical to com. I.

IT **79794-75-5P**, Loratadine
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of loratadine)

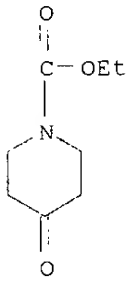
RN 79794-75-5 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(8-chloro-5,6-dihydro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-ylidene)-, ethyl ester (9CI) (CA INDEX NAME)



IT **29976-53-2**, N-(Ethoxycarbonyl)-4-piperidone

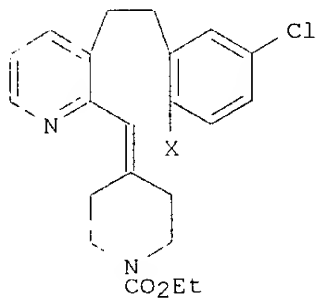
RL: RCT (Reactant)
(starting material; prepn. of loratadine)
RN 29976-53-2 CAPLUS
CN 1-Piperidinecarboxylic acid, 4-oxo-, ethyl ester (6CI, 8CI, 9CI) (CA INDEX NAME)



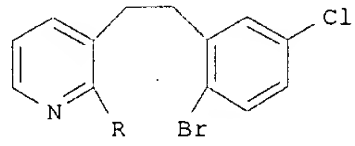
L19 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2000 ACS
AN 1996:623081 CAPLUS
DN 125:275660
TI New derivatives of 2-[(1-ethoxycarbonyl-4-piperidylidene)methyl]pyridine, useful as intermediates for loratadine, and a process for their preparation.
IN Gracia Egea, Antonio
PA Farmahispania, S.A., Spain
SO Span., 10 pp.
CODEN: SPXXAD
DT Patent
LA Spanish
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ES 2080699	A1	19960201	ES 1994-1646	19940727
ES 2080699	B1	19961016		

OS CASREACT 125:275660; MARPAT 125:275660
GI



I



II

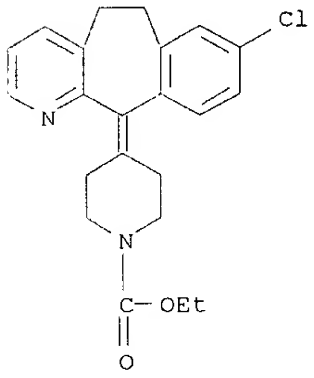
AB Title compds. I [X = halo], useful as new intermediates for the antihistaminic loratadine, are prepd. Thus, 3-methyl-N-tert-butylpicolinamide was lithiated with BuLi in THF, then treated with 2-bromo-5-chlorobenzyl bromide to give 100% intermediate II [R = CONHBu-tert]. This was hydrolyzed, first in refluxing 40% H2SO4, and then in aq. NaOH at .ltoreq. 50.degree., to give 37% II [R = CO2H], which was treated with ClCO2Et and Et3N, and then with aq. NaBH4, to give after acidification 80% II.HCl [R = CH2OH]. The latter was treated with SOCl2 to give 70% II [R = CH2Cl]. This was treated with P(OMe)3 at reflux to

give II [R = CH2P(O)(OMe)2], which reacted with NaH and N-ethoxycarbonyl-4-piperidone in THF to give 40% I [X = Br].

IT **79794-75-5P**, Loratadine
RL: PNU (Preparation, unclassified); PREP (Preparation)
(prepn. of [(ethoxycarbonylpiperidylidene)methyl]pyridine derivs. as intermediates for loratadine)

RN 79794-75-5 CAPLUS

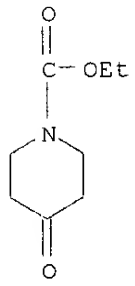
CN 1-Piperidinecarboxylic acid, 4-(8-chloro-5,6-dihydro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-ylidene)-, ethyl ester (9CI) (CA INDEX NAME)



IT **29976-53-2**, N-Ethoxycarbonyl-4-piperidone
RL: RCT (Reactant)
(starting material; prepn. of [(ethoxycarbonylpiperidylidene)methyl]pyr
idine derivs. as intermediates for loratadine)

RN 29976-53-2 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-oxo-, ethyl ester (6CI, 8CI, 9CI) (CA INDEX NAME)



L19 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2000 ACS

AN 1994:191547 CAPLUS

DN 120:191547

TI Process for the synthesis of 8-chloro-6,11-dihydro-11-(1-ethoxycarbonyl-4-piperidylidene)-5H-benzo[5,6]cyclohepta[1,2-b]pyridine [loratadine]

IN Tamarang, S. A.

PA Spain

SO Span., 6 pp.
CODEN: SPXXAD

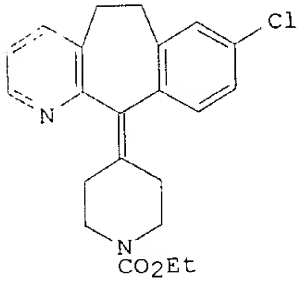
DT Patent

LA Spanish

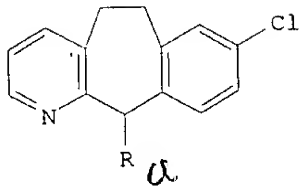
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

PI ES 2040177 A1 19931001 ES 1992-504 19920306
ES 2040177 B1 19940516
OS CASREACT 120:191547
GI



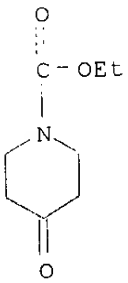
I



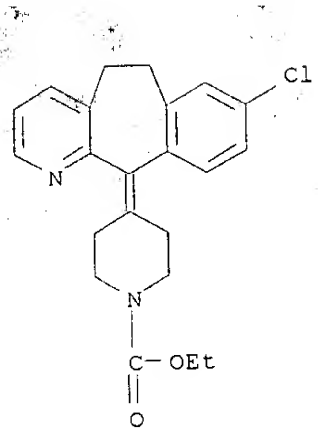
II

AB The antihistaminic loratadine (I) is prepd. by reaction of the dichlorodihydrobenzocycloheptapyridine II (R = Cl) with P(OMe)3, followed by Wittig-type reaction of the resultant phosphonate II [R = P(O)(OMe)2] with 1-(ethoxycarbonyl)-4-piperidone. The yield of the 1st step, conducted neat in excess P(OMe)3 at 120.degree., was practically quant. The 2nd step, conducted in various solvents using NaH as base, followed by extn. and recrystn. from MeCN, gave yields of 78% (THF), 75% (benzene), and 76% (toluene), with purity of I >99% in all cases.

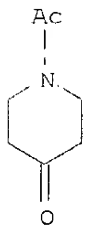
IT **29976-53-2**, 1-Ethoxycarbonyl-4-piperidone
RL: RCT (Reactant)
(Wittig reaction of, with di-Me chlorodihydrobenzocycloheptapyridinylphosphonate)
RN 29976-53-2 CAPLUS
CN 1-Piperidinecarboxylic acid, 4-oxo-, ethyl ester (6CI, 8CI, 9CI) (CA INDEX NAME)



IT **79794-75-5P**, Loratadine
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, via Wittig reaction of di-Me chlorodihydrobenzocycloheptapyridinylphosphonate)
RN 79794-75-5 CAPLUS
CN 1-Piperidinecarboxylic acid, 4-(8-chloro-5,6-dihydro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-ylidene)-, ethyl ester (9CI) (CA INDEX NAME)

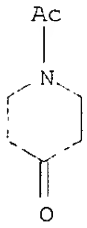

Cl
N
N
C
OEt
O

L6 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2000 ACS
AN 1990:552801 CAPLUS
DN 113:152801
TI A spacious cyclophane host for inclusion complexes of steroids and [m.n]paracyclophanes
AU Carcanague, Daniel R.; Diederich, Francois
CS Dep. Chem. Biochem., Univ. California, Los Angeles, CA, 90024-1569, USA
SO Angew. Chem. (1990), 102(7), 836-8
CODEN: ANCEAD; ISSN: 0044-8249
DT Journal
LA German
OS CASREACT 113:152801
GI For diagram(s), see printed CA Issue.
AB The cyclophane I was prepd. from 2-bromo-6-ethoxynaphthalene and 1-acetyl-4-piperidone. I forms inclusion complexes with cholic acid derivs. whose stability correlates with the no. of OH groups present in the steroid. I binds testosterone more tightly than cortisone or hydrocortisone. I also formed inclusion complexes with various paracyclophanes.
IT **32161-06-1**, 1-Acetyl-4-piperidone
RL: RCT (Reactant)
(Grignard reaction of, with ethoxynaphthyl bromide)
RN 32161-06-1 CAPLUS
CN 4-Piperidinone, 1-acetyl- (9CI) (CA INDEX NAME)



L6 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2000 ACS
AN 1987:214800 CAPLUS
DN 106:214800
TI Reactivity in aqueous basic medium of N-acyl 4-piperidones, soluble and fixed on a polyacrylamide support: hydration and aldolization
AU Sola, R.; Brugidou, J.; Taillades, J.; Commeyras, A.
CS Univ. Sci. Tech. Languedoc, Montpellier, 34060, Fr.
SO Nouv. J. Chim. (1986), 10(8-9), 499-506
CODEN: NJCHD4; ISSN: 0398-9836
DT Journal
LA French
AB Immobilization of 1-acyl-4-piperidone hydration catalysts (for amino acid manuf. from .alpha.-aminonitriles) on acrylamide polymers, did not affect the hydration equil. of the piperidones significantly. However, the network structure of crosslinked polyacrylamides suppressed intraresin trimerization which would result in catalyst deactivation. Intraresin **dimerization** was not inhibited by crosslinking. Crosslinking affected the intraresin aldol formation. The use of crosslinked resins improved the site isolation of the catalysts.

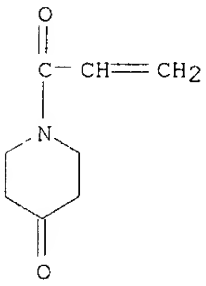
IT **32161-06-1**
RL: CAT (Catalyst use); USES (Uses)
(catalysts, for hydration of aminonitriles in amino acid manuf., hydration and aldolization equil. of, immobilization in relation to)
RN 32161-06-1 CAPLUS
CN 4-Piperidinone, 1-acetyl- (9CI) (CA INDEX NAME)



IT **108454-79-1 108454-79-1D**, hydrolyzed, aldolized
108454-80-4 108454-80-4D, hydrolyzed, aldolized
RL: CAT (Catalyst use); USES (Uses)
(catalysts, hydration and aldolization equil. of, network structure in relation to)
RN 108454-79-1 CAPLUS
CN 4-Piperidinone, 1-(1-oxo-2-propenyl)-, homopolymer (9CI) (CA INDEX NAME)

CM 1

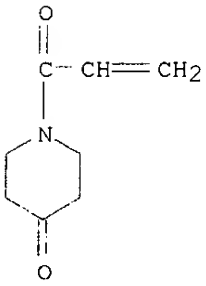
CRN 79404-69-6
CMF C8 H11 N O2

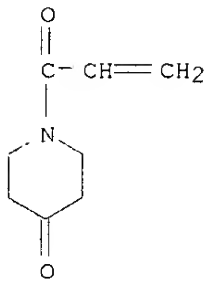


RN 108454-79-1 CAPLUS
CN 4-Piperidinone, 1-(1-oxo-2-propenyl)-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 79404-69-6
CMF C8 H11 N O2

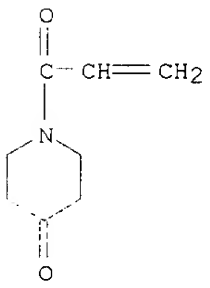




RN 108454-80-4 CAPLUS
CN 4-Piperidinone, 1-(1-oxo-2-propenyl)-, polymer with 1,4-bis(1-oxo-2-propenyl)piperazine (9CI) (CA INDEX NAME)

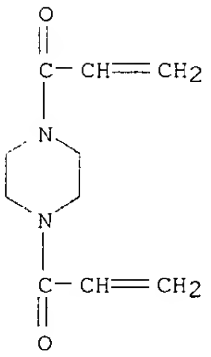
CM 1

CRN 79404-69-6
CMF C8 H11 N O2



CM 2

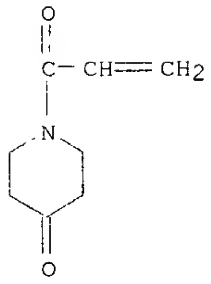
CRN 6342-17-2
CMF C10 H14 N2 O2



RN 108454-80-4 CAPLUS
CN 4-Piperidinone, 1-(1-oxo-2-propenyl)-, polymer with 1,4-bis(1-oxo-2-propenyl)piperazine (9CI) (CA INDEX NAME)

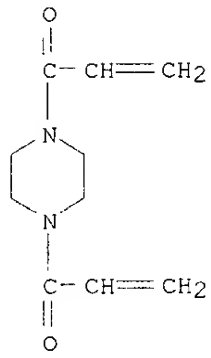
CM 1

CRN 79404-69-6
CMF C8 H11 N O2

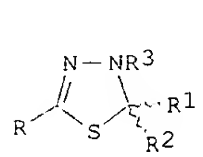


CM 2

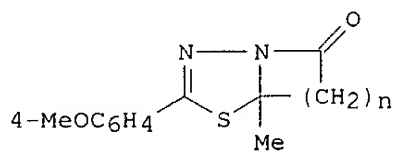
CRN 6342-17-2
CMF C10 H14 N2 O2



L6 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2000 ACS
AN 1987:138348 CAPLUS
DN 106:138348
TI Thiadiazoles and dihydrothiadiazoles. Part 5. Synthesis of 2,3-dihydro-1,3,4-thiadiazoles by reaction of aldehydes or ketones with thioaroylhydrazines
AU Evans, D. Michael; Hill, Lawrence; Taylor, David R.; Myers, Malcolm
CS Chem. Dep., Univ. Manchester Inst. Sci. Technol., Manchester, M60 1QD, UK
SO J. Chem. Soc., Perkin Trans. 1 (1986), (8), 1499-505
CODEN: JCPRB4; ISSN: 0300-922X
DT Journal
LA English
OS CASREACT 106:138348
GI



I



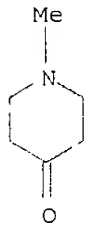
II

AB 1,3,4-Thiadiazole I [R = Ph, 4-MeOC6H4; R1 = H, Me, Ph; R2 = H, Me, Ph, 4-MeOC6H4, 4-MeC6H4, 4-ClC6H4, CH2COMe, (CH2)2CO2H, (CH2)3CO2H, 2-HOC6H4, R1R2 = (CH2)5, (CH2CH2)2NMe, R3 = H, Ph, CH2Ph, CHMe2] were prepd. by condensation of R1R2CO with RCSNHNHR3. The reaction of 4-MeOC6H4CSNHNH2 with MeCO(CH2)n CO2H (n = 2,3) gave I [R = 4-MeOC6H4, R1 = Me; R2 = (CH2)n CO2H; R3 = H], which were cyclized to give lactams II.

IT **1445-73-4**, N-Methyl-4-piperidone
RL: RCT (Reactant)
(cyclocondensation of, with thioaroylhydrazines)

RN 1445-73-4 CAPLUS

CN 4-Piperidinone, 1-methyl- (9CI) (CA INDEX NAME)



L6 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2000 ACS

AN 1985:487750 CAPLUS

DN 103:87750

TI Synthesis of bis(propynyloxy)benzene-containing 1-methyl-4-piperidinols and their reactions

AU Sadykov, T.; Praliev, S. D.; Erzhanov, K. B.; Kenbaeva, R. M.

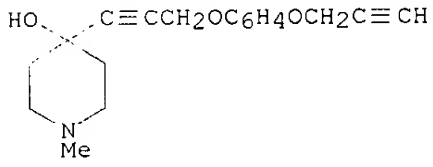
CS Inst. Khim. Nauk, Alma-Ata, USSR

SO Izv. Akad. Nauk Kaz. SSR, Ser. Khim. (1985), (2), 81-3
CODEN: IKAKAK; ISSN: 0002-3205

DT Journal

LA Russian

GI



I

AB Treatment of C6H4(OCH2C.tplbond.CH)2 (C6H4 = o-, m-, or p-phenylene) with 1-methyl-4-piperidinone afforded adducts I. Oxidative **dimerization** of I in the presence CuCl-pyridine gave the tetraacetylenic glycols.

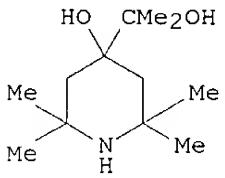
IT **1445-73-4**
RL: RCT (Reactant)
(addn. reaction of, with bis(propynyloxy)benzene)

RN 1445-73-4 CAPLUS

CN 4-Piperidinone, 1-methyl- (9CI) (CA INDEX NAME)

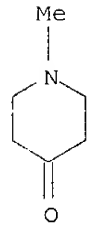
L6 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2000 ACS
AN 1983:125828 CAPLUS
DN 98:125828
TI Effect of the position of substituents on the photoreduction of 4-piperidones by isopropyl alcohol
AU Kostochka, L. M.; Belostotskii, A. M.; Skoldinov, A. P.
CS Nauchno-Issled. Inst. Farmakol., Moscow, USSR
SO Zh. Org. Khim. (1982), 18(12), 2623-4
CODEN: ZORKAE; ISSN: 0514-7492
DT Journal
LA Russian
GI

I



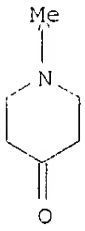
II

AB Photoredn. of 1-methyl- and 1-benzyl-4-piperidinone-HCl in Me2CHOH gave the corresponding alcs. in 70-5% yield. 1,2,5-Trimethyl- and 3-carbomethoxy-1-methylpiperidinone-HCl were inert under these conditions.
Tropinone and 2,2,6,6-tetramethyl-4-piperidinone-HCl were reduced to the alcs. but also gave appreciable amts. of reductive-addn. (I and II) and **dimerization** products. Thus, the reactivity of the piperidinones depended on whether substituents were present in the 1-, 2- or 3-position.
IT **34737-83-2**
RL: RCT (Reactant)
(photochem. redn. of, by isopropanol)
RN 34737-83-2 CAPLUS
CN 4-Piperidinone, 1-methyl-, hydrochloride (9CI) (CA INDEX NAME)



● HCl

L6 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2000 ACS
AN 1975:479027 CAPLUS
DN 83:79027
TI Dienelike synthesis of dihydropyrans by acetolysis of Mannich bases
AU Roth, H. J.; Haupt, M.
CS Pharm. Inst., Univ. Bonn, Bonn, Ger.
SO Arch. Pharm. (Weinheim, Ger.) (1975), 308(4), 241-52
CODEN: ARPMAS
DT Journal
LA German
GI For diagram(s), see printed CA Issue.
AB Pyrans I (RR1 = CH2CH2C6H4-o, 4,6,2-Me2(CMe2CH2)C6H4, 1,8-naphthalenediyl, CH2OC6H4-o) were formed by acetolysis of the Mannich bases of tetralone, 3,3,6,8-tetramethyltetralone, acenaphthenone, or 4-chromanone with piperidine. Acetolysis of 3-piperidinomethyl-1-methyl-4-piperidinone, on the other hand, yielded only polymers. The effect of ring size and ring systems on the acetolysis is discussed.
IT **1445-73-4**
RL: RCT (Reactant)
(Mannich reaction of, with piperidine)
RN 1445-73-4 CAPLUS
CN 4-Piperidinone, 1-methyl- (9CI) (CA INDEX NAME)



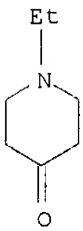
L9 ANSWER 1 OF 14 CAPLUS COPYRIGHT 2000 ACS
AN 2000:608746 CAPLUS
DN 133:207884
TI Preparation of paroxetine
IN Rossi, Renzo; Turchetta, Stefano; Donnarumma, Maria
PA Recordati S.A. Chemical and Pharmaceutical Co., Switz.
SO PCT Int. Appl., 33 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2000050422	A1	20000831	WO 2000-EP1430	20000222

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

		IT 1999-MI364	19990223

AB The title process employs stereoselective hydrogenation and etherification steps. Thus, 1-ethyl-4-(p-fluorophenyl)-3-hydroxymethyl-1,2,3,6-tetrahydropyridine (prepn. given) was subjected to hydrogenation catalyzed by a transition **metal** complex with a chiral diphosphinic ligand to give cis- and trans-(4R)-1-ethyl-4-(p-fluorophenyl)-3-hydroxymethylpiperidine followed by sesamol etherification to give a 10:90 mixt. of cis and trans diastereomers from which the trans diastereomer was isolated and N-deprotected to give paroxetine.
IT **3612-18-8**, 1-Ethyl-4-piperidone
RL: RCT (Reactant)
(prepn. of paroxetine)
RN 3612-18-8 CAPLUS
CN 4-Piperidinone, 1-ethyl- (9CI) (CA INDEX NAME)



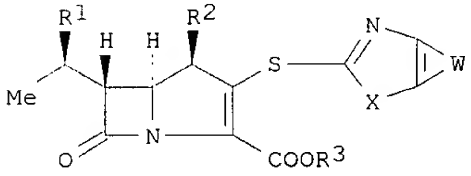
RE.CNT 3
RE
(1) Monsanto Co; WO 9209552 A 1992

(2) Novonordisk As; WO 9636636 A 1996
(3) Smithkline Beecham Plc; WO 9322284 A 1993

L9 ANSWER 2 OF 14 CAPLUS COPYRIGHT 2000 ACS
AN 1999:736712 CAPLUS
DN 131:336878
TI Preparation of novel .beta.-lactam compounds as antibacterials
IN Sunagawa, Makoto; Yamaga, Hiroshi; Sumita, Yoshihiro; Shinagawa, Hisatoshi
PA Sumitomo Pharmaceuticals Company, Limited, Japan
SO PCT Int. Appl., 44 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9958536	A1	19991118	WO 1999-JP2261	19990428
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
			JP 1998-142151	19980508
AU 9940576	A1	19991129	AU 1999-40576	19990428
			JP 1998-142151	19980508
			WO 1999-JP2261	19990428

OS MARPAT 131:336878
GI



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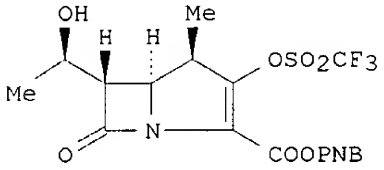
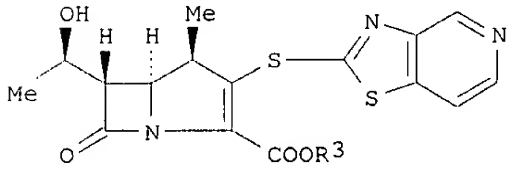


II



III

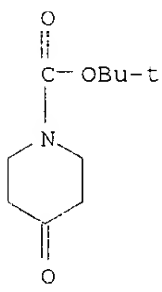
AB Title compds. I [R1 = (hydroxy) lower alkyl; R2 = H, lower alkyl; X = O,

S; R3 = H, **metal**, protecting group; W = part of a 6- or 7-membered heterocycle contg. nitrogen optionally substituted at carbon atoms], possessing excellent antibacterial activity on gram-pos. bacteria, in particular methicillin resistant Staphylococcus aureus and methicillin resistant coagulase neg. Staphylococcus aureus (no data), are prepd. Thus, carbapenem deriv. II was treated with 2-mercaptopyrido[3,4-d][1,3]thiazole in CH2Cl2 contg. NaH to give 39% III [R3 = p-nitrobenzyl], which was deprotected (palladium over carbon) and the product was isolated as the sodium salt [III; R3 = Na].

IT **79099-07-3**, 1-tert-Butoxycarbonyl-4-piperidinone
RL: RCT (Reactant)
(prepn. of novel antibacterial .beta.-lactam derivs.)

RN 79099-07-3 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-oxo-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RE.CNT 9

RE

(1) Anon; JP 10-508285 A
(2) Anon; BR 1101108 A3
(3) Anon; EP 268963 A1
(4) Anon; EP 337637 A1 CAPLUS
(8) Merck & Co, Inc; WO 9525108 A1 1995 CAPLUS

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 3 OF 14 CAPLUS COPYRIGHT 2000 ACS

AN 1999:421689 CAPLUS

DN 131:59133

TI Preparation of hydantoin derivatives substituted at position 5, .alpha.-amino acid alkali **metal** salts, and cyclic .alpha.-amino acid esters

IN Tendjoun, Victor; Refouvelet, Bernard

PA Seranalis, Fr.

SO PCT Int. Appl., 42 pp.
CODEN: PIXXD2

DT Patent

LA French

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9932488	A1	19990701	WO 1998-FR2787	19981218

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,

FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

			FR 1997-16072	19971218
FR 2772762	A1	19990625	FR 1997-16072	19971218
FR 2772762	B1	20000526		
AU 9918807	A1	19990712	AU 1999-18807	19981218
			FR 1997-16072	19971218
			WO 1998-FR2787	19981218

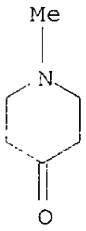
OS MARPAT 131:59133

AB Hydantoin derivs. substituted at position 5 were prepd. from carbonyl compds. by reactions with a cyanide compd. and an ammonium compd. The hydantoin derivs. were converted into .alpha.-amino acid alkali **metal** salts and esters. Thus, 8-methyl-1,3,8-Triazaspiro[4.5]decane-2,4-dione, prepd. by reaction of N-methyl-4-piperidone with sodium carbonate and potassium cyanide in ethanol-water, was treated with potash in aq. ethoxyethanol to afford 4-amino-1-methylpiperidine-4-carboxylic acid, which converted into the Me ester.

IT **1445-73-4**, n-Methyl-4-piperidone
RL: RCT (Reactant)
(prepn. of hydantoin derivs. substituted at position 5, .alpha.-amino acid alkali **metal** salts, and cyclic .alpha.-amino acid esters)

RN 1445-73-4 CAPLUS

CN 4-Piperidinone, 1-methyl- (9CI) (CA INDEX NAME)



RE.CNT 2

RE

(1) Huls; FR 1365051 A 1964

(2) Huls; FR 1376824 A 1965

L9 ANSWER 4 OF 14 CAPLUS COPYRIGHT 2000 ACS

AN 1997:528750 CAPLUS

DN 127:190845

TI N,N'-Dimethyl-3,7-diazabicyclo[3.3.1]nonane Nickel(0) Complexes: Applying the Macrocyclic Effect to Smaller Ring Structures

AU Haack, Karl-Josef; Goddard, Richard; Poerschke, Klaus-Richard

CS Max-Planck-Institut fuer Kohlenforschung, Muelheim an der Ruhr, D-45466, Germany

SO J. Am. Chem. Soc. (1997), 119(34), 7992-7999
CODEN: JACSAT; ISSN: 0002-7863

PB American Chemical Society

DT Journal

LA English

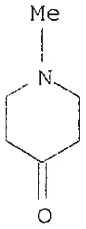
AB The two N donor atoms in the tertiary diamine N,N'-dimethyl-3,7-diazabicyclo[3.3.1]nonane (dabn, C9H18N2) are ideally positioned in the bicyclic structure for chelation to a **metal** center. This feature was utilized to synthesize unusual diamine nickel(0)-ethene and -ethyne complexes, which represent limiting cases of the Pearson hard-soft acid-base concept. Thus, the reaction of Ni(C2H4)3 with dabn affords yellow TP-3 (C9H18N2)Ni(C2H4) (1) (dec. 0.degree.) in which the ethene ligand displays extreme high-field NMR shifts at .delta.(H) 0.27 and

.delta.(C) 20.4 and an exceptionally small coupling const. 1J(CH) = 142 Hz. Reaction of 1 with butadiene yields the red mononuclear T-4 complex (C9H18N2)Ni(.eta.2-C4H6)2 (2a) in soln., from which the dinuclear deriv. {(C9H18N2)Ni(.eta.2-C4H6)}2(.mu.-.eta.2,.eta.2-C4H6) (2) (dec. 20.degree.) is isolated. Complexes 2 and 2a are more sol. than 1 and thus better suited for further reactions. When ethyne is added to a soln. of 2 or 2a at -78.degree., the yellow TP-3 complex (C9H18N2)Ni(C2H2) (3) (dec. -30.degree.) is obtained. The ethyne ligand of 3 exhibits the lowest IR C.tplbond.C stretching frequency (1560 cm-1) and by far the smallest NMR coupling const. 1J(CH) = 178 Hz yet reported for a mononuclear nickel(0)-ethyne complex. In addn., Ni(CO)4 reacts with dabn to yield orange T-4 (C9H18N2)Ni(CO)2 (4). The results demonstrate that tertiary diamines, which are hard Lewis bases and which a priori are expected to coordinate poorly to the soft Lewis acid Ni(0), may be supported in such a coordination by the stabilizing principle of preorganization and consequently act as very powerful donor ligands.

IT **1445-73-4**, 1-Methyl-4-piperidone
RL: RCT (Reactant)
(conversion to diazabicyclononane)

RN 1445-73-4 CAPLUS

CN 4-Piperidinone, 1-methyl- (9CI) (CA INDEX NAME)



L9 ANSWER 5 OF 14 CAPLUS COPYRIGHT 2000 ACS

AN 1996:693779 CAPLUS

DN 125:307199

TI Coatings of .beta.-diketone **metal** complexes in polar aprotic solvents for forming **metal** oxide films

IN Tanitsu, Katsuya; Nakayama, Muneo; Sato, Yoshimi

PA Tokyo Ohka Kogyo Co Ltd, Japan

SO Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF

DT Patent

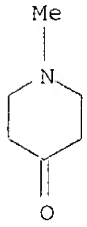
LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 08231926	A2	19960910	JP 1995-329455	19951127
	JP 2824751	B2	19981118		

AB Storage-stable coating compns. giving uniform **metal** oxide films with improved adhesion contain .beta.-diketone **metal** complexes and .gtoreq.1 aprotic solvent selected from DMF, N,N-dimethylacetamide, acetonitrile, DMSO, N,N,N',N'-tetraethylsulfamide, hexamethylphosphoric acid triamide, N-methylmorpholone, N-methylpyrrole, N-ethylpyrrole, N-methyl-.DELTA.3-pyrroline, N-methylpiperidine, N-ethylpiperidine, N,N-dimethylpiperazine, N-methylimidazole, N-methyl-4-piperidone, N-methyl-2-piperidone, N-methyl-2-pyrrolidone (I), 1,3-dimethyl-2-imidazolidinone, and 1,3-dimethyltetrahydro-2(1H)-pyrimidinone. Thus, a sodium silicate glass plate was impregnated with a mixt. of Et acetoacetate Al diisopropylate 15, acetylacetone 3, and I 25 parts after 12-mo storage, dried at 140.degree. for 15 min, and fired at 500.degree.

for 60 min to give an Al2O3 pin hole-free coating showing good adhesion to
the substrate.
IT **1445-73-4**, N-Methyl-4-piperidone
RL: NUU (Nonbiological use, unclassified); USES (Uses)
(storage-stable coatings contg. .beta.-diketone **metal** complex
in aprotic solvents for forming **metal** oxide films)
RN 1445-73-4 CAPLUS
CN 4-Piperidinone, 1-methyl- (9CI) (CA INDEX NAME)



L9 ANSWER 6 OF 14 CAPLUS COPYRIGHT 2000 ACS
AN 1993:587608 CAPLUS
DN 119:187608
TI A composition and method for simultaneous absorption of sulfur dioxide and
nitric oxide
IN Chang, Dane; Bedell, Stephen A.; Kirby, Larry H.
PA Dow Chemical Co., USA
SO PCT Int. Appl., 47 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9303825	A1	19930304	WO 1992-US6736	19920812
W: CA, DE, GB, JP				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, SE				
			US 1991-744157	19910813
CA 2093901	AA	19930214	CA 1992-2093901	19920812
			US 1991-744157	19910813
EP 552360	A1	19930728	EP 1992-918433	19920812
R: DE, GB				
			US 1991-744157	19910813
			WO 1992-US6736	19920812
JP 06502349	T2	19940317	JP 1993-504406	19920812
			US 1991-744157	19910813
			WO 1992-US6736	19920812
GB 2264488	A1	19930901	GB 1993-7576	19930413
GB 2264488	B2	19950222		
			US 1991-744157	19910813
			WO 1992-US6736	19920812

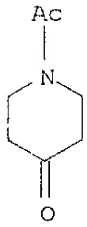
OS MARPAT 119:187608
AB SO2 and NO are simultaneously removed from flue gases by an absorption process and app. using an absorbent compn. comprising an aq. soln. of chelates and sulfite salt for NO abatement and amine SO2 absorbents such as piperazinones, morpholinones, piperidines, piperazines, piperazinediones, hydantoins, triazinones, pyrimidinones, oxazolidones, etc., for SO2 abatement. SO2 is thermally stripped from the spent absorbent and recovered. **Metal** chelates oxidized to an inactive state as a side-reaction are electrochem. reduced. An anionic exchange membrane in the electrochem. cell regenerates heat stable amine salt

byproducts to be converted back to usable amine sorbent, and facilitates removal from the absorbent soln. of other waste salts.

IT **32161-06-1**, 1-Acetyl-4-piperidone
RL: OCCU (Occurrence)
(for sulfur dioxide absorption, from flue gases)

RN 32161-06-1 CAPLUS

CN 4-Piperidinone, 1-acetyl- (9CI) (CA INDEX NAME)



L9 ANSWER 7 OF 14 CAPLUS COPYRIGHT 2000 ACS

AN 1988:221582 CAPLUS

DN 108:221582

TI Thienospirans. VI. Spiro-substituted thieno[3,4-c]furans by regioselective lithiations

AU Sauter, Fritz; Stanetty, Peter; Froehlich, Hannes

CS Inst. Org. Chem., Tech. Univ. Vienna, Vienna, A-1060, Austria

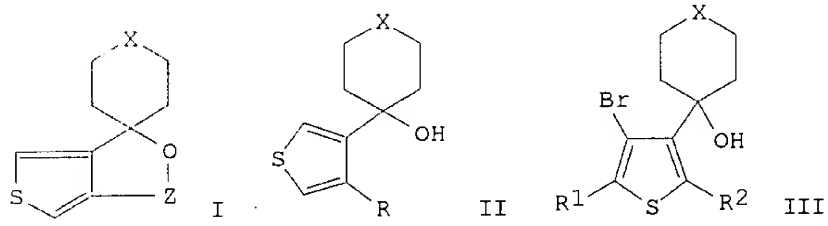
SO Heterocycles (1987), 26(10), 2657-72
CODEN: HTCYAM; ISSN: 0385-5414

DT Journal

LA English

OS CASREACT 108:221582

GI

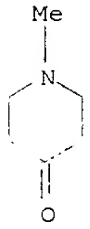


AB The title compds. I (X = CH2, CHNMe2, NMe, Z = CO, CHPh) were obtained by cyclization of 3,4-disubstituted thiophenes II (R = CO2H, CHPhOH) prepd. in one-pot reactions starting from 3,4-dibromothiophene by means of two consecutive lithiations and addns. of carbonyl compds. By a combination of variation of the solvent and of the lithiating agent in the second metalation step and by influence of the substituent introduced in the first step, it was possible to obtain good yields of either II by **metal**-halogen exchange, 2,3-disubstituted 4-bromothiophenes, e.g., III (R1 = H, R2 = CHPhOH, X = CH2) by directed lithiation, or 2,4-disubstituted 3-bromothiophenes III (R1 = CHPhOH, R2 = H, X = CH2, NMe) by controlled ortho-metalation.

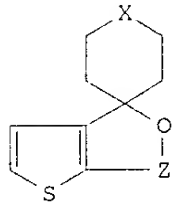
IT **1445-73-4**, N-Methyl-4-piperidone
RL: RCT (Reactant)
(condensation of, with lithiated thiophenes)

RN 1445-73-4 CAPLUS

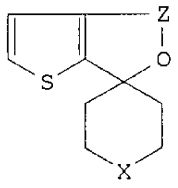
CN 4-Piperidinone, 1-methyl- (9CI) (CA INDEX NAME)



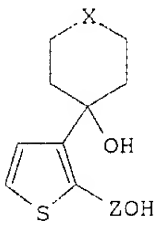
L9 ANSWER 8 OF 14 CAPLUS COPYRIGHT 2000 ACS
AN 1988:221581 CAPLUS
DN 108:221581
TI Thienospirans. V. Thienospirans via directed lithiations
AU Sauter, Fritz; Stanetty, Peter; Froehlich, Hannes; Ramer, Wolfgang
CS Inst. Org. Chem., Tech. Univ. Vienna, Vienna, A-1060, Austria
SO Heterocycles (1987), 26(10), 2639-56
CODEN: HTCYAM; ISSN: 0385-5414
DT Journal
LA English
OS CASREACT 108:221581
GI



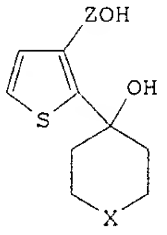
I



II



III

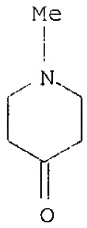


IV

AB Using halogen-**metal** exchange and ortho-directed metalation methodologies, spiro(thieno[b]furans) I and II (X = CH2, CHNMe2, NMe, Z = CO, CHPh) were synthesized starting from 3-bromothiophene, in one case proceeding via cyclization of the 2,3-difunctionalized thiophenes III and in the other case proceeding via cyclization of the isomeric compds. IV.

IT **1445-73-4**, N-Methyl-4-piperidone
RL: RCT (Reactant)
(condensation with lithiated thiophene)

RN 1445-73-4 CAPLUS
CN 4-Piperidinone, 1-methyl- (9CI) (CA INDEX NAME)



L9 ANSWER 9 OF 14 CAPLUS COPYRIGHT 2000 ACS
AN 1987:565530 CAPLUS
DN 107:165530
TI Film-forming compositions comprising polyglutarimide
IN Brunsvold, William R.; Crockatt, Dale M.; Skinner, Michael Patrick
PA International Business Machines Corp. , USA
SO Eur. Pat. Appl., 24 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 219626	A2	19870429	EP 1986-110658	19860801
	EP 219626	A3	19890524		
	R: DE, FR, GB, IT				
				US 1985-788366	19851017
	CA 1290087	A1	19911001	CA 1986-507288	19860422
				US 1985-788366	19851017
	JP 62099747	A2	19870509	JP 1986-193006	19860820
				US 1985-788366	19851017

AB Film-forming compns. which are useful as pos. resists sensitive to both electron beams and deep UV radiation are comprised of polyglutarimides, preferably polydimethylglutarimide, and at least both a solvent and a nonsolvent for the polyglutarimide with an initial viscosity of 390 to 1200 cSt at 20.degree. to 30.degree.. The polyglutarimide has high glass transition temp. and provides resists of high thermal stability and very fine spatial resoln.; hence, they are useful in microcircuitry processing.

The dry thickness of the resists on wafers is controlled by the viscosity of the film-forming compns. which is, in turn, controlled by the ratio between the solvent and the nonsolvent. The film-forming compns. are capable of forming dry resist films .gtoreq.1 .mu.m thick on substrates, which are useful as planarizing under layers, **metal** lift-off layers, and parts of multilayer resist structures, by spin casting. Thus,

a compn. contg. polydimethylglutarimide 14.5, N-methylpyrrolidone 21.37, and anisole 64.11% (viscosity 518 cSt) was spin-cast on a Si wafer at 3000

rpm for 60 s to give a dry resist film with a thickness of 1.87 .mu.m. The thickness of a dry resist film obtained by spin casting a compn. contg. polydimethylglutarimide 15.0, N-methylpyrrolidone 21.258 and anisole 63.75% was 2.11 .mu.m.

IT **32161-06-1**, 1-Acetyl-4-piperidone
RL: USES (Uses)
(polyglutarimide radiation-sensitive resist compns. contg. nonsolvent and solvent of)
RN 32161-06-1 CAPLUS
CN 4-Piperidinone, 1-acetyl- (9CI) (CA INDEX NAME)